

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

GLENN BURTON, JR.,
Plaintiff,

v.

Case No. 07-CV-0303

AMERICAN CYANAMID et al.,
Defendants;

RAVON OWENS,
Plaintiff,

v.

Case No. 07-CV-0441

AMERICAN CYANAMID et al.,
Defendants;

CESAR SIFUENTES,
Plaintiff,

v.

Case No. 10-CV-0075

AMERICAN CYANAMID et al.,
Defendants.

DECISION AND ORDER

Plaintiffs bring these negligence and strict products liability claims against various manufacturers and alleged successors-in-interest to manufacturers of white lead carbonate pigment (WLC). Plaintiffs allege that they were harmed by ingesting paint containing WLC when they were children. Because each plaintiff allegedly cannot identify the specific manufacturer of the WLC that caused his or her harm, plaintiffs proceed on Wisconsin's risk contribution theory, which relaxes the traditional causation standard by allowing plaintiffs in WLC cases to establish a *prima facie* case on a

showing that the defendant WLC manufacturer produced or marketed WLC during the time that the house where the plaintiff allegedly ingested WLC existed. *Thomas ex. rel. Gramling v. Mallett*, 2005 WI 129, ¶161, 285 Wis.2d 236, 701 N.W.2d 523. After the plaintiff has made out this *prima facie* case, the burden shifts to each defendant manufacturer to prove by a preponderance of the evidence that it did not produce or market white lead carbonate during the relevant time period or in the geographic market where the plaintiff was exposed to lead. *Id.* at ¶ 163. The defendants have also asserted other affirmative defenses. The parties have filed several motions for summary judgment on issues related both to plaintiffs' *prima facie* claims and the various defenses.

The parties have also filed a host of motions to exclude various sorts of evidence at trial, including the opinion testimony of various expert witnesses. When reviewing a summary judgment motion, I may only consider evidence that would be admissible at trial. *Hardrick v. City of Bolingbrook*, 522 F.3d 758, 761 (7th Cir.2008). Therefore, in the present order I will decide several evidentiary issues so that I may proceed towards resolution of the pending summary judgment motions.

I do note that when a case is still at the summary judgment stage, it is potentially inefficient to address certain evidentiary issues, which "may never arise." See 21 Kenneth W. Graham, *Federal Practice and Procedure* § 5037.10 (2d ed.), Westlaw (updated Apr. 2017). "[D]ecisions on the admissibility of evidence made without the benefit of the context of the trial are more likely to be wrong," and "even were it possible to predict the trial context on a motion in limine, . . . changes between the time of the motion and the time of trial will often require courts to reconsider the motion," causing

“needless duplication of effort.” *Id.* My intent at present is to resolve those issues that are material to the pending summary judgment motions, and those that may be efficiently resolved at the present stage of litigation. Certain of the evidentiary issues raised in the motions under consideration are premature and will be denied without prejudice; the parties may raise them again if they so wish, closer to the time of trial.

I. LEGAL STANDARD

Generally, relevant evidence is admissible at trial. Fed. R. Evid. 402. Rule 401 provides that “[e]vidence is relevant if (a) it has any tendency to make a fact more or less probable than it would be without the evidence; and (b) the fact is of consequence in determining the action.” Fed. R. Evid. 401. Rule 403 further provides that I may exclude relevant evidence “if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” Fed. R. Evid. 403.

The admissibility of expert testimony is governed by Federal Rule of Evidence 702 and *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). See *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir.2007). Rule 702 provides that:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

The inquiry consists of three general areas: (1) the testimony must be “helpful,” which dovetails with the relevance requirements of Fed. R. Evid. 401–403; (2) the expert must be qualified by knowledge, skill, experience, training, or education; and (3) the testimony must be reliable and fit the facts of the case. *Lyman v. St. Jude Medical S.C., Inc.*, 580 F.Supp. 2d 719, 722 (E.D.Wis.2008).

Under the third part of the analysis, I examine whether (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case. Fed. R. Evid. 702. I am to act “as a ‘gatekeeper’ for expert testimony, only admitting such testimony after receiving satisfactory evidence of its reliability.” *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 869 (7th Cir.2001). The proponent of the expert bears the burden of demonstrating that the expert’s testimony would satisfy the Daubert standard. *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 805 (7th Cir. 2009); Fed. R. Evid. 702 advisory committee’s note (2000 Amends.) (“[T]he admissibility of all expert testimony is governed by the principles of Rule 104(a). Under that Rule, the proponent has the burden of establishing that the pertinent admissibility requirements are met by a preponderance of the evidence.”).

II. ANALYSIS

a. Plaintiffs’ Expert Historians

Defendant Atlantic Richfield has filed a motion to exclude all testimony by plaintiffs’ expert historians Gerald Markowitz, David Rosner and John Gurda. Plaintiffs have filed a brief in opposition. In addition, defendant Sherwin-Williams has filed a brief in opposition to Atlantic Richfield’s motion, and defendant DuPont has moved for joinder

in Sherwin-Williams' opposition. Atlantic Richfield has also filed a concurrent motion to limit the testimony of these historians, in the event that their testimony is not excluded in its entirety. Defendants Armstrong Containers, Sherwin-Williams and American Cyanamid have all partially joined this narrower motion.

Gerald Markowitz is a Distinguished Professor of History at John Jay College of Criminal Justice and the Graduate Center, City University of New York and adjunct professor of Sociomedical Sciences at Columbia's Mailman School of Public Health. He received his doctorate from the Department of History of the University of Wisconsin. He is a recipient of numerous prestigious awards, grants and prizes for his work as a historian of public health. He has authored books, articles and reports on the history of lead, lead poisoning, and the historical manufacture, promotion and sale of lead pigments and lead paints. Markowitz' expert report offers the following opinions:

- (1) "Each of the defendants manufactured, marketed and sold white lead carbonate both nationally and in Wisconsin," No. 07-C-0303, ECF No. 582-21 at 2;
- (2) "Each of the Defendants was a member of at least one Industry Trade Association. Those associations engaged in joint promotion campaigns for White Lead Carbonate that failed to warn consumers and parents about the dangers of White Lead Carbonate to Children," *id.* at 13;
- (3) "Defendants, individually and through their industry associations, promoted lead for use without warning of the hazards of lead to children," *id.* at 17;

- (4) Defendants failed to warn consumers and the public by downplaying the hazards that each knew or should have known were associated with lead in residential use," *id.* at 50; and
- (5) Defendants never warned of the known and knowable dangers until 1955 at the earliest; *id.* at 58.

Markowitz bases these conclusions on "his education, training, publications and review of the literature and internal documents for each Defendant and their trade associations for the opinions in this report." *Id.* at 2. The report asserts that "[e]ach opinion is held to a reasonable degree of historical certainty." *Id.*

David Rosner is the Ronald H. Lauterstein Professor of Sociomedical Sciences and Professor of History in the Graduate School of Arts and Sciences at Columbia University. He holds a Ph.D. in the History of Science from Harvard University. Like Dr. Markowitz, Dr. Rosner is a recipient of numerous prestigious awards, grants and prizes, and has authored books, articles and reports on the history of lead, lead poisoning, and the historical manufacture, promotion and sale of lead pigments and lead paints. Rosner's report offers the following specific opinions:

- (1) "Each of the defendants knew or should have known that White Lead Carbonate ('Lead') was poisonous to children based on information that was available at the relevant times from the medical and scientific literature," No. 07-CV-0303, ECF No. 582-20 at 3;
- (2) "Each of the defendants knew or should have known that lead was poisonous to children based on information that was available at the relevant times from industry sponsored researchers," *id.* at 18;

- (3) “Each of the defendants knew or should have known that lead was poisonous to children based on information that was available at the relevant times from legislative and government bodies that had banned lead,” *id.* at 19; and
- (4) “Each of the defendants had actual knowledge that lead was poisonous to children,” *id.* at 22.

Rosner bases these conclusions on “his education, training, publications and review of the literature and internal documents for each Defendant and their trade associations for the opinions in this report.” *Id.* at 2. The report asserts that “[e]ach opinion is held to a reasonable degree of historical certainty.” *Id.*

John Gurda is a freelance writer and public historian whose work largely focuses on the Milwaukee community. He holds an M.A. from the University of Wisconsin-Milwaukee in Cultural Geography, and an honorary Ph.D. from the same institution in Milwaukee History and Geography. Plaintiffs requested that Gurda identify the manufacturers of residential paints and coatings who were present in the Milwaukee retail market between 1900 and 1972. Gurda’s report offers the following opinions:

- (1) Each of the defendants had a presence in Milwaukee, No. 07-CV-0303, ECF No. 582-39 at 2; and
- (2) No warning appeared in any advertisement that I reviewed regarding the hazards of lead.

Gurda bases his opinions upon a review of documents provided by researchers from plaintiffs’ attorney’s office, as well as independent research in historical archives and collections.

Atlantic Richfield argues that the testimony of these experts should be excluded in its entirety because it is not based in “scientific, technical or other specialized knowledge” as required by Rule 702. According to Atlantic Richfield, these experts’ testimony is based entirely on documentary evidence¹ from the record that the jurors can understand for themselves; the experts’ testimony amounts only to reading aloud, summarizing, and “spinning” these documents. In other words, though the witnesses may qualify as experts based on their knowledge, training and education, their proffered opinions are not *expert* opinions because they are not informed by that expertise. Rather, they are simply lay opinions “broached by a purported expert.” See *Jones v. Lincoln Elec. Co.*, 188 F.3d 709, 723 (7th Cir. 1999). As such, Atlantic Richfield argues, the testimony is not “helpful” to the jury, and might unduly influence the jury’s independent assessment of the facts.

Atlantic Richfield is correct that, to be admissible, expert testimony must offer “something more than what is obvious to the layperson.” *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 871 (7th Cir. 2001). An expert’s opinion can be helpful to the trier of fact “only to the extent the expert draws on some special skill, knowledge or experience to formulate an opinion.” *United States v. Hall*, 93 F.3d 1337, 1343 (7th Cir. 1996) (internal citation omitted). As Atlantic Richfield states the point, “a legitimate expert relies on knowledge gained outside the case that enables the expert to tell the jurors something about the evidence that they could not understand on their own.”

Even when the words on the face of an historical document are comprehensible to the lay juror, a trained historian can contribute tremendously to the accuracy and

¹ To the extent that these documents contain hearsay, Atlantic Richfield notes that the “ancient documents” exception renders many of them nevertheless admissible. No. 07-CV-0303, ECF No. 575 at 7.

completeness of the juror's understanding by situating the document in its historical context---a context with social, economic, technological, linguistic, and medical dimensions, to name but a few. Historians can also provide a meta-understanding of the historical record itself: its completeness, the biases built into it, and the degree of certainty with which facts may be asserted or broader trends identified upon its basis. Finally, a historian's synthesis of various source materials that enables the jury to perceive patterns and trends can also be "helpful" within the meaning of Rule 702. Courts have recognized the helpfulness of expert historians testifying in these ways. See, e.g., *Langbord v. United States Department of Treasury*, 832 F.3d 170, 193 (3rd Cir. 2016) (though expert "read portions of his source material verbatim to the jury, the excerpts he chose from voluminous historical materials provided context and explained past events); *Marvel Characters, Inc. v. Kirby*, 726 F.3d 119, 135–36 (2d Cir. 2013) (noting that "synthesiz[ing] dense or voluminous historical texts" and offering "context that illuminates or places in perspective past events" are proper uses of historical expertise); *Walden v. City of Chicago*, 755 F.Supp.2d 942, 951 (N.D.Ill 2010) (historian's expertise includes "knowing where to search for sources, formulating searches based on an understanding of the history of the period in question, and evaluating the reliability of the sources").

Furthermore, such helpful contextualization may be done on the basis of a reliable methodology. Proper historical work involves surveying the full array of available sources, evaluating the reliability of the sources, and thus "providing a basis for a 'reliable narrative about that past.' *Langbord*, 832 F.3d at 195, quoting *United States v. Kantengwa*, 781 F.3d 545, 562 (1st Cir. 2015); also see Alvaro Hasani, *Putting History*

on the Stand: A Closer Look at the Legitimacy of Criticisms Levied Against Historians Who Testify As Expert Witnesses, 34 Whittier L. Rev. 343, 354-55 (2013). Proper historical methodology is further characterized by thorough documentation of sources and a critical awareness of the historian's own biases.

I find that each of the plaintiffs' historians' reports contains at least some examples of testimony that might be helpful to the jury by using appropriate historical methodology to situate documents in the historical context that gave rise to them or to situate documents within the historical record. Both Dr. Markowitz' report and Dr. Rosner's report place industry publications, communications among lead industry officials, medical reports, and other documents in historical context by synthesizing them into a narrative that cognizes background social, scientific and political change. The reports also evaluate the reliability of these documents by examining who created them and why (e.g., differentiating between industry-sponsored, government-sponsored and academic medical research). Mr. Gurda's helpfulness is of a different sort; he is an expert in researching Milwaukee history, and so he is able to inform the jury about the local historical record and the degree to which the provided documents represent the scope of available knowledge. Atlantic Richfield's argument that these historians' testimony will not be helpful to the jury is overbroad and does not justify wholesale exclusion of their testimony.

Atlantic Richfield's concurrent motion to limit the testimony of these experts identifies four categories of opinion as to which Atlantic Richfield argues the historians should not be permitted to testify.

First, Atlantic Richfield seeks to preclude the historians from opining as to corporate successorship, and even from mentioning Atlantic Richfield. Defendant Armstrong Containers, Inc. has joined in this portion of the motion. Plaintiffs have alleged that Atlantic Richfield is a successor to five now-defunct companies and Atlantic Richfield its successorship to four of them. Atlantic Richfield is concerned that in their reports the experts asserted Atlantic Richfield's successorship without a factual basis, and that they used Atlantic Richfield's name as shorthand to refer to Atlantic Richfield's alleged predecessors. Similarly, Armstrong seeks to preclude the historians from misidentifying Armstrong's alleged predecessor MacGregor Lead as Armstrong. This evidentiary issue is not material to any of the pending summary judgment motions², and it is also an issue of a sort most likely to be decided accurately and efficiently closer to trial, when the triable questions are more clearly resolved. See 21 Kenneth W. Graham, *Federal Practice and Procedure* § 5037.10 (2d ed.), Westlaw (updated Apr. 2017). I will deny this portion of Atlantic Richfield's motion without prejudice; Atlantic Richfield or Armstrong may raise the issue again closer to trial.

Second, Atlantic Richfield moves that the witnesses be precluded from testifying about pigment manufacturer's legal, moral, or ethical duties. According to Atlantic Richfield, "while [the experts] disclaim any intention to testify about legal duties, they clearly intend to express opinions about moral and ethical duties." In support of this assertion, Atlantic Richfield points to Professor Rosner's statement that a historian acting as an expert witness is called upon to "judge" the defendants. Atlantic Richfield has also flagged several statements from Markowitz' and Rosner's reports and

² Plaintiffs' pending motions for partial summary judgment on the issue of Armstrong Containers, Inc. being successor-in-interest to the John R. MacGregor Lead Company (e.g. No. 07-CV-0303, ECF No. 629) do not rely upon or cite to the opinions of their expert historians.

depositions that do suggest a tendency by these experts to veer into normative terrain: e.g., that paint and pigment manufacturers failed to meet “moral and social responsibilities”; that pigment manufacturers had an obligation to know about the specific hazards of white lead carbonate; that a company was “a very irresponsible company” if it did not know; that paint manufacturers had a responsibility to provide warnings not later than by 1939; that pigment manufacturers should have provided “substantial education about the means of protecting people from exposure,” such as a “program to educate parents not to use paint on cribs and other items”; and that pigment manufacturers had a “greater” obligation to warn than paint manufacturers. Atlantic Richfield’s grounds for excluding such testimony are (1) that moral and ethical duties are not material in a lawsuit, where a party’s rights and liabilities should be decided according to legal duties alone; (2) that testimony about moral and ethical duties will serve only to confuse the jury if it conflicts with the Court’s instruction on legal duties, and (3) that these witnesses have no specialized knowledge concerning legal, moral or ethical duties. Each of these points is correct and I am sympathetic to Atlantic Richfield’s concerns; however, the boundary of what constitutes a moral or ethical opinion is blurry, and I am reluctant to issue a blanket statement precluding all such testimony when historical norms around industrial behavior and public health will certainly be a material portion of the historical context these witnesses will be called upon to provide at trial. I will deny this portion of Atlantic Richfield’s motion, and will respond to the concerns raised here by means of careful rulings on Rule 403 objections at trial.

Third, Atlantic Richfield, joined by other defendants, seeks to bar the witnesses from testifying about the actual or imputed knowledge of the pigment manufacturers, i.e. that they “knew or should have known” about lead poisoning during the first half of the twentieth century. Atlantic Richfield argues that the witnesses’ assertions that the manufacturers had *actual* knowledge of the contemporaneous scientific understanding of lead poisoning should be excluded as speculative, because the witnesses have seen no internal documents of those companies showing that they actually knew about the published scientific reports and articles upon which the witnesses rely. But it is certainly within the scope of a historian’s expertise to draw inferences about historical actors’ knowledge and beliefs based on evidence about the availability of information at a given historical moment in combination with contextual knowledge of that moment’s general practices and mechanisms regarding information dissemination. To the extent that defendants wish to challenge the facts and assumptions underpinning such inferences, they may do so in the course of cross examination. Atlantic Richfield also objects to the witnesses’ use of the phrase “should have known”—as in, the defendants knew or should have known about lead poisoning—calling it impermissible testimony about legal, moral, or ethical obligations. I see no evidence in the reports (and Atlantic Richfield has identified none) that the expert witnesses intend the phrase to denote a legal, moral, or ethical obligation to know certain information; rather, I take the phrase as indicating an opinion that that it is reasonable to infer from the historical record that the defendants had actual knowledge of the information. I will not categorically exclude this testimony; should the phrase “should have known” become a problem in the sense

of distorting issues or misleading the jury, defendants may raise those objections in the course of trial.

Finally, Atlantic Richfield and other defendants seek to bar the plaintiffs' expert witnesses from testifying concerning the intent, motive or mental state of pigment or paint manufacturers. Atlantic Richfield points as an example to an exchange during Professor Rosner's deposition in which he (1) stated that when representatives of the Lead Industries Association looked into whether a medical report on lead poisoning was accurate, they were not "trying to protect the public"; (2) characterized the LIA as operating out of a "self-interested attempt to create an alternative narrative about the dangers of the product, a narrative that they're trying to challenge because of their own interest, not because of scientific or intellectual interest; and (3) stated that the Secretary of the LIA was "worried about states possibly passing legislation, and he's trying to make sure that that does not happen. And that's not an honest reason for doing scientific investigations."

Atlantic Richfield argues that such testimony should be barred because evidence of manufacturer's intent, motive, and mental state is immaterial to the issues raised in the present case. I cannot agree. For example, Atlantic Richfield concedes that one of the contested issues is whether the defendants had a duty to warn, which hinges on a finding that the defendants had knowledge of a risk associated with their product that was not widely known by the public. If, as is alleged, some lead pigment manufacturers were making public claims that their product was safe during the relevant period, testimony about their intent will be necessary so that the jury can decide whether to treat those public claims of product safety as indicative of the defendant's underlying

knowledge of the risks, or whether to contextualize them as part of an effort to create, as Dr. Rosner says, an “alternative narrative.” That is one example of this testimony’s possible relevance; there may be others that emerge as this litigation proceeds towards trial.

Atlantic Richfield also argues that the historians are not qualified to testify about the mental state of individuals or corporations, because their opinions are not based on scientific, technical, or other specialized knowledge as required by Rule 702. As I have already discussed, properly conducted expert historian analysis is “reliable” within the meaning of Rule 702. Rosner and Markowitz have cited ample historical sources from which they draw their conclusions about the mental state of the defendants and their officers; challenges to their sources and assumptions may be raised on cross examination. Further, the testimony of expert historians on this issue is also particularly likely to be “helpful” within the meaning of Rule 702, as witnesses with personal knowledge of the mental states in question are long deceased and unavailable to testify. I will not categorically exclude this sort of testimony.

b. Defendants’ Market Share Experts

The defendants, acting collectively and separately, seek to admit the testimony of several experts regarding the shares of the market for WLC pigment that were held by various WLC manufacturers at times relevant to this litigation. These experts’ testimony may be summarized as follows:

- Peter Golder, an expert retained by Cyanamid, Sherwin-Williams, DuPont and Armstrong, offers to testify that National Lead Company³ (“National Lead”) “was the leading manufacturer of, advocate for the use of, and innovator in the development of white lead carbonates for use as a pigment in residential paint, and dominated the market for that product from 1891 through 1955.”
- Michael Reis, an expert retained by Armstrong Containers, offers to testify that Armstrong’s alleged predecessor, the John R. MacGregor Lead Company (“MacGregor”) was a small player in the national paint and pigments industry throughout MacGregor’s history; that MacGregor had a small presence in the Milwaukee area; that the MacGregor paint market share in the Milwaukee area was “minuscule” compared to the market share for other brands; and that other brand-named paints to which MacGregor allegedly contributed WLD held minimal market share in the Milwaukee area.
- Alan Sorensen, an expert retained by Cyanamid, offers to testify that the share of national sales of WLC for use in all forms of paint attributable to the June 1971 to December 1972 period when Cyanamid manufactured WLC for use in paint is below half a percent of total national WLC sales during the time period of each plaintiffs’ residence’s existence.
- David Teece, an expert retained by Sherwin-Williams, offers to testify *inter alia* that most white lead in oil and white lead paint sold in Milwaukee was likely made by manufacturers other than Sherwin Williams.

³ National Lead is no longer a defendant in this case, having reached a settlement with the plaintiffs on a *Pierringer* basis, meaning that plaintiffs have agreed to be held responsible for National Lead’s proportionate share of any verdict. No. 07-CV-0303, ECF No. 244 at 2.

- Colleen Dunlavy, Ph.D., an expert historian retained by Sherwin-Williams, offers to testify *inter alia* that Sherwin-Williams WLC was not likely to have been used on the houses at issue because the Milwaukee paint and pigment market was dominated by other manufacturers and Sherwin-Williams had “only slight” penetration of the market.
- Kent Van Liere, an expert retained by Sherwin-Williams, offers to testify that Sherwin-Williams’ contribution was less than 0.2 percent of the total WLC sold for use in residential paints in Milwaukee county during the period of 1894 to 2002; and that Sherwin-Williams was not a major brand used by Milwaukee-area residents during the time period in which Sherwin Williams manufactured white lead carbonate.

Testimony of this sort is not relevant to liability under the *Thomas* model. Under *Thomas*, a plaintiff may establish a *prima facie* case against a manufacturer by showing that the manufacturer produced or marketed WLC during the plaintiff’s residence’s existence. 285 Wis.2d 236 at ¶ 161. The burden then shifts to each defendant “to prove by a preponderance of the evidence that it *did not* produce or market white lead carbonate either during the relevant time period or in the geographical market where the house is located.” *Id.* at ¶ 163 (emphasis added). Previously in the course of this litigation, I have held that an exculpatory defense on the basis of chemical analysis of paint taken from the residences at issue is cognizable within the *Thomas* framework. See No. 07-CV-0303, ECF No. 1060 at 4-7. However, evidence that a particular defendant was *unlikely* to have caused a plaintiff’s injury, or less likely than another defendant to have caused plaintiff’s injury, is categorically different from the evidence of

absolute exculpation recognized in the defenses noted above. See *id.* at ¶ 153 (noting that the court's concern in risk contribution cases is "with providing possibly innocent defendants a means to exculpate themselves by establishing their product *could not* have caused the injury") (emphasis supplied). Also see *Collins v. Eli Lilly Co.*, 116 Wis.2d 166, 198 (1984) ("We believe that this procedure will result in a pool of defendants which it can reasonably be assumed *could have* caused the plaintiff's injuries. . . . This still could mean that some of the remaining defendants may be innocent, but we accept this as the price the defendants, and perhaps ultimately society, must pay to provide the plaintiff an adequate remedy under the law.") (emphasis supplied). Evidence addressing the relative likelihood that one manufacturer or another caused the plaintiff's harm is properly considered in the context of the apportionment of damages. Indeed, the *Collins* court specifically identified market share as a factor that a jury might consider when apportioning liability "among the defendants that have been unable to exculpate themselves." *Id.* at 200.

Before me at this summary judgment stage are issues of liability, not damages; therefore, I will not consider market share evidence at this time. For present purposes, I will grant plaintiff's motions to exclude the market share testimony identified above.

c. *Michael Reis*

In addition to the opinions regarding market share detailed above, Armstrong's expert Michael Reis also offers to testify that evidence suggests Armstrong's alleged predecessor MacGregor did not sell WLC for use in paints to other companies. Plaintiffs seek to exclude this opinion as unreliable, arguing that Mr. Reis "cherry-picked" evidence from the historical record and ignored evidence that might have led him to

reach a different conclusion. Specifically, plaintiffs object to Reis's reliance on an affidavit given by former president of MacGregor, Robert C. Beil, to support his conclusion, while discounting evidence to the contrary that includes a deposition by another MacGregor executive, Mr. Mack, and documents ostensibly produced by other manufacturers noting their use of "Scotch Laddie" (i.e., MacGregor) white lead.

An expert witness may be excluded for "cherry-picking" only when the witness ignores some facts and data without adequate explanation, while accepting others. *Barber v. United Airlines*, 17 Fed.Appx. 433, 437 (7th Cir., 2001); *c.f. Chaudry v. Provident Life and Accident Ins. Co.*, 2015 WL 1756832 at *3 (N.D. Ill., 2015) (rejecting plaintiff's contentions that expert disregarded contrary evidence where expert provided a basis for his disagreement). I find that in his report and deposition, Mr. Reis did provide an adequate explanation for his treatment of each of the sources that plaintiffs identify as contradicting his proffered opinion. In his report, Mr. Reis explains that he treats Mr. Mack's testimony as less reliable because Mack acknowledged having little direct knowledge of sale of the MacGregor line of products. Mr. Reis justifies his reliance on Beil's testimony by referencing another source in the historical record that corroborates it: an industry-specific directory of chemical suppliers which did not list MacGregor as a provider of white lead carbonate pigments. At his deposition, Mr. Reis also explained why the other manufacturers' documents referencing Scotch Laddie did not lead him to alter his conclusions; essentially, he describes the documents as capable of multiple interpretations and not necessarily indicating a sale of product.

Again, proper historical work involves surveying the full array of available sources, evaluating the reliability of the sources, and thus "providing a basis for a

'reliable narrative about [the] past.' *Langbord*, 832 F.3d at 195. Mr. Reis surveyed multiple sources, evaluated the reliability of those sources, and synthesized them into a reasonable narrative. Plaintiffs may certainly challenge Mr. Reis's assumptions and his reasoning in the course of cross-examination, and the jury may find reason not to accept his conclusions. But I am satisfied that the methodology supporting Mr. Reis' conclusion about MacGregor's sales of WLC to other manufacturers is sufficiently reliable to survive a *Daubert* challenge, and I will deny this portion of plaintiffs' motion.

d. David Teece

David Teece is an economist and business professor, not a historian. Sherwin-Williams retained him as an expert witness in this litigation, and he offers the following opinions:

- (1) Dynamic capabilities and innovation have driven Sherwin-Williams long-term business strategy and success in the marketplace;
- (2) Innovation by manufacturers such as Sherwin Williams has important economic benefits;
- (3) Sherwin-Williams business strategy was designed to shift the market away from white lead in oil;
- (4) Sherwin-Williams advertising and promotions reflected its business strategy;
- (5) It is unlikely that Sherwin-Williams' white lead in oil or its paints with WLC pigments were used on plaintiffs' residences;
- (6) A disproportionate damages award against Sherwin-Williams would likely lead to adverse economic and policy consequences.

Opinions (1)-(4) may be helpful to the jury's allocation of damages, should this litigation reach that stage. *Collins*, 116 Wis. 2d at 200 ("In assigning a percentage of liability to each defendant, the jury may consider factors which include, but are not limited to, the following: . . . whether the company took the lead or merely followed the lead of others in producing or marketing [the harmful product]; . . . and whether the company took any affirmative steps to reduce the risk of injury to the public. This list of factors is not exclusive, and the trial court may in its discretion permit the jury to consider other factors relevant to apportioning liability."). Opinion (6) may be relevant to the question whether public policy factors preclude liability, which I am required to address under Wisconsin law; however, that question will not be ripe for my consideration until after a jury has fully resolved all factual questions with respect to both liability and damages. *Alvarado v. Sersch*, 262 Wis. 2d 74. ¶18 (2003). None of opinions (1)-(4) or (6) bears on liability; thus it would be inefficient for me to address the admissibility of these opinions at the present stage of litigation. See 21 Kenneth W. Graham, *Federal Practice and Procedure* § 5037.10 (2d ed.), Westlaw (updated Apr. 2017). I will deny plaintiff's motion without prejudice, insofar as it seeks to exclude opinions (1)-(4) and (6).

That leaves opinion (5): "It is unlikely that Sherwin-Williams' white lead in oil or its paints with WLC pigments were used on plaintiffs' residences." Professor Teece offers two sub-opinions in support of this broader conclusion: "Geographic markets for retail paint in Milwaukee were likely small"; and "Most white lead in oil and white lead paint sold in Milwaukee was likely made by other manufacturers." I addressed the admissibility of the "other manufacturers" opinion in Section II.b, *supra*. I now consider the admissibility of Dr. Teece's "small geographic markets" opinion.

As an initial matter, plaintiffs do not challenge Dr. Teece's qualification to provide this opinion. Plaintiffs do, however, challenge the reliability of the testimony, and assert that Dr. Teece relied upon unsupported assumptions in reaching his conclusion.

Dr Teece's expert report indicates he formed his opinion on the basis of the following methodology. First, he drew upon his knowledge of economic concepts to define the "relevant geographic market" as the "spatial area in which firms selling particular products compete," and to assert that "one factor that is generally considered when defining relevant geographic markets, especially in the context of retail products, is the cost and difficulty of transporting the product (or the cost and difficulty of a customer traveling to a sellers location), in relation to its price." Then he cited to a 2015 Federal Trade Commission investigation of supermarkets and discount stores that "focused on a geographic radius as small as 0.5 miles." Using that radius as a referent, he then reasons that the geographical markets for paint in the first half of the 20th century were likely even smaller, because transportation infrastructure is better today, because many families did not own automobiles in the first half of the 20th century, because gasoline was relatively expensive, and because paint is bulky and difficult to transport.

This reasoning relies on a number of assumptions for which Dr. Teece offers little rationale. First, he assumes that cost and difficulty of transportation is the dispositive factor in determining the geographic market for paint in the early 20th Century. His report suggests that there are other factors, but does not identify them or explain why they do not enter into his analysis. Second, he assumes that the cost and difficulty that consumers in 2015 were willing to incur to travel to a supermarket or discount store is

analogous to the cost or difficulty that consumers in the first half of the 20th century were willing to incur in order to purchase paint. There are a number of reasons to question that assumption. Consumers are likely to travel to the supermarket or discount store several times a week, but to purchase paint far less frequently. Also, consumers generally do their own supermarket shopping, but (as Dr. Teece references in ¶ 64 of his report) during the relevant time period, master painters and not consumers often purchased the paint and transported it to the job site. It is possible that Dr. Teece has good reason for making the assumptions noted here, but he does not articulate such a reason. Because I have no way to evaluate this essential piece of his methodology, I cannot find that his opinion was formed through application of reliable principles and methods. I will grant plaintiffs' motions to exclude this portion of his opinion testimony.

e. Colleen Dunlavy

Colleen Dunlavy, an expert historian retained by Sherwin Williams, offers several opinions of which plaintiffs have moved to exclude the following three:

- (1) Sherwin-Williams white lead carbonate pigments were not likely to have been used on the houses at issue. Surviving historical records indicate that the Milwaukee paint market was dominated by local manufacturers and that Sherwin-Williams had only slight penetration of the paint market through the 1950s. It never achieved a market position to rival that of local manufacturers. The Milwaukee market for white lead carbonate pigments, moreover was dominated by the National Lead Company, and ample evidence indicates that many other companies also offered white lead for sale in Milwaukee. There is no evidence that Sherwin-Williams ever sold its lead to other manufacturers.

(2) The available evidence indicates that Sherwin-Williams did not promote white lead carbonate pigments or the use of white lead in oil to the same degree that its competitors such as national lead did.

(3) Existing historical records indicate that Sherwin-Williams did not use white lead carbonate pigments in its interior architectural paint formulas (with very few exceptions). In its exterior architectural paint formulations, the company reduced its use of white lead carbonate pigments significantly as improved pigments such as its own leaded zinc oxide (Ozlo) and titanium became available. By the late 1940s, the company had eliminated white lead carbonates from its exterior architectural paints (except for its mildew-resistant and undercoater formulations). The available evidence indicates that Sherwin-Williams affiliates generally used similar formulations.

I addressed opinion (1) in section II.b, *supra*. Opinion (2) may be relevant to the allocation of damages, but it would be inefficient for me to address the opinion's admissibility at the present stage of the litigation. See my discussion in section II.d, *supra*. I will deny plaintiffs' motions without prejudice to the extent that they seek exclusion of opinion (2). That leaves the admissibility of opinion (3) for my present resolution. Plaintiffs seek its exclusion on grounds of both relevance and reliability.

Dr. Dunlavy's opinion is relevant. Previously in the course of this litigation, I have held that an exculpatory defense on the basis of chemical analysis of paint taken from the residences at issue is cognizable within the *Thomas* framework. See No. 07-CV-0303, ECF No. 1060 at 4-7. This defense requires the defendant to identify the formulas for the paint products known to contain the defendant's WLC; these formulas are then

compared against the chemical composition of the paint in the samples from the plaintiff's home. Dr. Dunlavy's report provides a historical basis on which to define the known universe of paint products containing Sherwin-Williams WLC, and is thus relevant to Sherwin-Williams' exculpatory defense.

Dr. Dunlavy's opinion (3) is also reliable. The thirty-three page section of her disclosure in which she explains the basis for her opinions contains 293 footnotes citing to a wide variety of primary sources, and she consistently cites to multiple sources in support of each individual assertion. Plaintiffs' argument is essentially that her opinion is unreliable because she reaches the same conclusion as another of Sherwin-William's experts whose methodology plaintiffs assert was unreliable. This, however, is a critique of Dr. Dunlavy's conclusions and not her methods; disagreement with an expert's conclusions are not grounds for exclusion under *Daubert* and Rule 702. *Daubert v. Merrell Dow Pharm.,* 509 U.S. 579, 595 (1993) ("The focus, of course, must be solely on principles of methodology, not on the conclusions that they generate."). I will deny plaintiffs' motions to the extent they seek to exclude Dr. Dunlavy's opinion (3).

f. Glen Bugos

Glen Bugos, an expert historian retained by DuPont, offers his conclusion that "there is **no evidence** that any product containing white lead carbonate pigment manufactured by DuPont was ever for sale in Milwaukee County" (emphasis supplied). Plaintiffs seek to exclude this testimony on grounds of both relevance and reliability.

Regarding relevance, plaintiffs' argument begins with this passage from *Thomas*:

"Once [the plaintiff] makes a *prima facie* case . . . , the burden of proof shifts to each defendant to prove by a

preponderance of the evidence that it did not produce or market white lead carbonate either during the relevant time period or in the geographical market where the house is located. However, **if relevant records do not exist** that can substantiate either defense, we believe that the equities of white lead carbonate cases favor placing the consequences on the pigment manufacturers.”

285 Wis.2d 236 at ¶ 163 (emphasis supplied; internal citations omitted). Plaintiffs argue that because Bugos’ testimony is based on a *lack* of evidence, it cannot serve as the basis for exculpation under *Thomas*; instead it amounts to an admission that “relevant records do not exist.” It is error, however, to conflate a lack of evidence with a lack of relevant records. For example, Mr. Bugos reviewed store advertisements that contained exhaustive lists of DuPont products for sale, but did not include any products containing WLC. Products from other companies that likely contained WLC did appear in these particular advertisements. These advertisements are “relevant records” because if DuPont products containing WLC had been offered for sale in the stores, the products would also likely have been listed alongside the other similar products in the advertisements. The inclusion in the advertisement of other DuPont products and of other products containing WLC renders both significant and relevant the omission of DuPont products containing WLC. In addition to these advertisements, Dr. Bugos reviewed city directories; internal DuPont documentation including product catalogs and product indexes; wholesaler catalogs; and hardware catalogs. This search yielded

records that are relevant in that, aggregated, they reveal an overall historical picture of the paint market in Milwaukee that does not include products containing DuPont WLC.

Plaintiffs also argue for total exclusion of Dr. Bugos' testimony on ground that his methods are unreliable. Plaintiffs argue, essentially, that Dr. Bugos conclusion that there is "no evidence" that any product containing DuPont WLC was ever sold in Milwaukee County must be methodologically flawed because it does not account for evidence to the contrary, which includes a ledger entry from Acme White Lead and Color works documenting that Acme bought WLC from DuPont, and the presence in Milwaukee of a DuPont wholesaler. Dr. Bugos did provide an explanation for his disregard of each of these pieces of evidence: he stated that his review of the overall, 868 page Acme document containing the ledger entry revealed many inconsistencies and obvious errors, such that the ledger entry cannot be taken as reliable evidence of a sale of WLC to Acme; he also stated that he investigated DuPont's wholesaler in Milwaukee and concluded that it did not sell Dupont paint products to local retail stores.

In sum, Dr. Bugos broadly surveyed the historical record, evaluated the reliability of sources, and synthesized his findings into a reliable narrative about the past. The evidence plaintiff cites as contrary to Dr. Bugos' conclusion provides a basis for cross examination, but does not warrant exclusion of his testimony as unreliable. These arguments go to the weight of the testimony and not its reliability. See *Manpower, Inc. v. Insurance Co. of Pennsylvania*, 732 F.3d 796, 806 (7th Cir. 2013)(reliability is an assessment of the validity of methodology, not the quality of the data used in applying the methodology or the conclusions generated).

Finally, plaintiffs move more narrowly to exclude Dr. Bugos' opinion that National Lead and its predecessor were the most likely suppliers of white lead carbonate for the relevant houses in Milwaukee. For the reasons and subject to the limitations explained in Section II.b, *supra* (addressing market share experts), I will grant this portion of Plaintiffs' motion.

g. Joseph Kalt

Joseph Kalt is an economist retained by Atlantic Richfield as an expert witness in this litigation. Plaintiffs move narrowly to exclude his proffered testimony that "there is no non-speculative basis to conclude that [Atlantic Richfield's predecessors] ALPC or IS&R lead pigment is present in homes in Milwaukee today, much less in the homes at issue in this case" on grounds that the testimony is irrelevant and may prejudice or confuse the jury. Similar to their argument regarding Dr. Bugos "no evidence" opinion, see section II.g, *supra*, plaintiffs argue that Dr. Kalt's "no non-speculative basis" opinion is irrelevant because it relies on an "absence of evidence," when the *Thomas* court had stated that consequences were to fall to the pigment manufacturers "if relevant records do not exist" to substantiate a defense. However, my reading of Dr. Kalt's affidavit (No. 07-CV-0303, ECF No. 308-2 at 5-26) reveals that he is, in fact, drawing his conclusion from relevant records: his method appears to be to examine records identified by the plaintiffs' expert historians and to identify reasons why those records do not support an inference that WLC made by Atlantic Richfield's alleged predecessors was used in residential paint in Milwaukee. Dr. Kalt's testimony may not be enough on its own to meet Atlantic Richfield's burden of proof with respect to the geographic market exculpatory defense, but it is certainly relevant to that defense. Concerns that Dr. Kalt's

testimony may confuse the jury may be addressed at trial. Plaintiffs do not challenge Dr. Kalt's testimony on any other grounds. I will deny plaintiffs' motion to exclude this portion of Dr. Kalt's opinion testimony.

THEREFORE, IT IS ORDERED that Defendant E.I. DuPont de Nemours Company's Joinder in Defendant The Sherwin Williams Company's Opposition to Defendant Atlantic Richfield Company's Motion to Exclude All Testimony by Plaintiffs' Expert Historians David Rosner, Gerald Markowitz, and John Gurda (No. 07-C-0303, ECF No. 849; No. 07-C-0441, ECF No. 779; No. 10-C-0075, ECF No. 715) is **GRANTED**.

IT IS FURTHER ORDERED that Defendant Atlantic Richfield Company's Motion to Exclude All Testimony by Plaintiff's Expert Historians Gerald Markowitz, David Rosner and John Gurda (No. 07-C-0303, ECF No. 574; No. 07-C-0441, ECF No. 520; No. 10-C-0075, ECF No. 452) is **DENIED**.

IT IS FURTHER ORDERED that Defendant The Sherwin-Williams Company's Motion for Joinder in Defendant Atlantic Richfield Company's Motion in Limine Precluding Specific Testimony by Gerald Markowitz, David Rosner and John Gurda (No. 07-C-0303, ECF No. 583; No. 07-C-0441, ECF No. 511; No. 10-C-0075, ECF No. 435) is **GRANTED**.

IT IS FURTHER ORDERED that Defendant Armstrong Containers, Inc.'s Joinder in Defendant Atlantic Richfield Company's Reply in Support of Its Motion In Limine Precluding Specific Testimony by Gerald Markowitz, David Rosner, and John Gurda (No. 07-C-0303, ECF No. 1005; No. 07-C-0441, ECF No. 936; No. 10-C-0075, ECF No. 873) is **GRANTED**.

IT IS FURTHER ORDERED that Defendant Atlantic Richfield Company's Motion in Limine to Preclude Specific Testimony by Gerald Markowitz, David Rosner and John Gurda (No. 07-C-0303, ECF No. 537; No. 07-C-0441, ECF No. 474; No. 10-C-0075, ECF No. 406) is **DENIED**.

IT IS FURTHER ORDERED that Defendant American Cyanamid Company's Motion for an Order In Limine To Preclude Specific Testimony by Gerald Markowitz and David Rosner (No. 07-C-0303, ECF No. 592; No. 07-C-0441, ECF No. 528; No. 10-C-0075, ECF No. 460) is **DENIED**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude Expert Opinion Testimony of Dr. Peter N. Golder Ph.D. (No. 07-C-0303, ECF No. 588; No. 07-C-0441, ECF No. 529; No. 10-C-0075, ECF No. 464) are **GRANTED**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude the General Expert Opinions of Kent Van Liere, Ph.D. (No. 07-C-0303, ECF No. 679; No. 07-C-0441, ECF No. 603; No. 10-C-0075, ECF No. 531) are **GRANTED**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude Opinions of Alan Sorensen, Ph.D. (No. 07-C-0303, ECF No. 686; No. 07-C-0441, ECF No. 621 ; No. 10-C-0075, ECF No. 550) are **GRANTED**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude the General Expert Opinions of Michael C. Reis (No. 07-C-0303, ECF No. 709; No. 07-C-0441, ECF No. 548; No. 10-C-0075, ECF No. 479) are **GRANTED IN PART** and **DENIED IN PART**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude the Expert Opinions and Testimony of Glenn Bugos, Ph.D. (No. 07-C-0303, ECF No. 566; No. 07-C-0441, ECF No. 508; No. 10-C-0075, ECF No. 433) are **GRANTED IN PART** and **DENIED IN PART**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude the Expert Opinions and Testimony of David J. Teece. (No. 07-C-0303, ECF No. 624; No. 07-C-0441, ECF No. 557; No. 10-C-0075, ECF No. 486) are **GRANTED IN PART** and **DENIED IN PART**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Limit the Expert Opinion Testimony of Colleen A. Dunlavy, Ph.D. (No. 07-C-0303, ECF No. 621; No. 07-C-0441, ECF No. 553; No. 10-C-0075, ECF No. 483) are **GRANTED IN PART** and **DENIED IN PART**.

IT IS FURTHER ORDERED that Plaintiffs' Motions to Exclude Expert Opinion Testimony of Joseph P. Kalt, Ph.D. (No. 07-C-0303, ECF No. 577; No. 07-C-0441, ECF No. 516; No. 10-C-0075, ECF No. 444) are **DENIED**.

Dated in Milwaukee, Wisconsin, this 16th day of August, 2018.

s/Lynn Adelman
LYNN ADELMAN
United States District Judge